

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/594,339  
Source: JFWP  
Date Processed by STIC: 10/13/2006

# ***ENTERED***

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/594,339

CRF Edit Date: 10/13/2006  
Edited by: PA

\_\_\_ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

\_\_\_ Corrected the SEQ ID NO. Sequence numbers edited were:

\_\_\_\_\_

\_\_\_ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

\_\_\_\_\_

\_\_\_ Deleted: \_\_\_ invalid beginning/end-of-file text ; \_\_\_ page numbers

\_\_\_ Inserted mandatory headings/numeric identifiers, specifically:

\_\_\_\_\_

\_\_\_ Moved responses to same line as heading/numeric identifier, specifically:

\_\_\_\_\_

\_\_\_ Other: Moved the number up (1347)

\_\_\_\_\_

\_\_\_\_\_



IFWP

## RAW SEQUENCE LISTING

DATE: 10/13/2006

PATENT APPLICATION: US/10/594,339

TIME: 15:00:13

Input Set : A:\ptc.da.txt

Output Set: N:\CRF4\10132006\J594339.raw

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3 <110> APPLICANT: Kyoto University
5 <120> TITLE OF INVENTION: Cleaved forms of DANCE and DANCE complexes, and methods of
screening
6 an agent for regulating formation of elastic fibre using them
W--> 8 <130> FILE REFERENCE:
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/594,339
C--> 10 <141> CURRENT FILING DATE: 2006-09-27
10 <150> PRIOR APPLICATION NUMBER: JP 2004-096685
W--> 11 <151> PRIOR FILING DATE: 2004-3-29
13 <160> NUMBER OF SEQ ID NOS: 29
15 <170> SOFTWARE: PatentIn version 3.2
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 1347
19 <212> TYPE: DNA
20 <213> ORGANISM: Homo sapiens
23 <220> FEATURE:
24 <221> NAME/KEY: CDS
25 <222> LOCATION: (1)..(1347)
27 <400> SEQUENCE: 1
28 atg cca gga ata aaa agg ata ctc act gtt acc att ctg gct ctc tgt 48
29 Met Pro Gly Ile Lys Arg Ile Leu Thr Val Thr Ile Leu Ala Leu Cys
30 1 5 10 15
32 ctt cca agc cct ggg aat gca cag gca cag tgc acg aat ggc ttt gac 96
33 Leu Pro Ser Pro Gly Asn Ala Gln Ala Gln Cys Thr Asn Gly Phe Asp
34 20 25 30
36 ctg gat cgc cag tca gga cag tgt tta gat att gat gaa tgc cga acc 144
37 Leu Asp Arg Gln Ser Gly Gln Cys Leu Asp Ile Asp Glu Cys Arg Thr
38 35 40 45
40 atc ccc gag gcc tgc cga gga gac atg atg tgt gtt aac caa aat ggc 192
41 Ile Pro Glu Ala Cys Arg Gly Asp Met Met Cys Val Asn Gln Asn Gly
42 50 55 60
44 ggg tat tta tgc att ccc cgg aca aac cct gtg tat cga ggg ccc tac 240
45 Gly Tyr Leu Cys Ile Pro Arg Thr Asn Pro Val Tyr Arg Gly Pro Tyr
46 65 70 75 80
48 tcg aac ccc tac tcg acc ccc tac tca ggt ccg tac cca gca gct gcc 288
49 Ser Asn Pro Tyr Ser Thr Pro Tyr Ser Gly Pro Tyr Pro Ala Ala Ala
50 85 90 95
52 cca cca ctc tca gct cca aac tat ccc acg atc tcc agg cct ctt ata 336
53 Pro Pro Leu Ser Ala Pro Asn Tyr Pro Thr Ile Ser Arg Pro Leu Ile
54 100 105 110
56 tgc cgc ttt gga tac cag atg gat gaa agc aac caa tgt gtg gat gtg 384
57 Cys Arg Phe Gly Tyr Gln Met Asp Glu Ser Asn Gln Cys Val Asp Val
58 115 120 125
60 gac gag tgt gca aca gat tcc cac cag tgc aac ccc acc cag atc tgc 432

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## RAW SEQUENCE LISTING

DATE: 10/13/2006

PATENT APPLICATION: US/10/594,339

TIME: 15:00:13

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\10132006\J594339.raw

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61 Asp Glu Cys Ala Thr Asp Ser His Gln Cys Asn Pro Thr Gln Ile Cys
62      130                      135                      140
64 atc aat act gaa ggc ggg tac acc tgc tcc tgc acc gac gga tat tgg      480
65 Ile Asn Thr Glu Gly Gly Tyr Thr Cys Ser Cys Thr Asp Gly Tyr Trp
66 145                      150                      155                      160
68 ctt ctg gaa ggc cag tgc tta gac att gat gaa tgt cgc tat ggt tac      528
69 Leu Leu Glu Gly Gln Cys Leu Asp Ile Asp Glu Cys Arg Tyr Gly Tyr
70      165                      170                      175
72 tgc cag cag ctc tgt gcg aat gtt cct gga tcc tat tct tgt aca tgc      576
73 Cys Gln Gln Leu Cys Ala Asn Val Pro Gly Ser Tyr Ser Cys Thr Cys
74      180                      185                      190
76 aac cct ggt ttt acc ctc aat gag gat gga agg tct tgc caa gat gtg      624
77 Asn Pro Gly Phe Thr Leu Asn Glu Asp Gly Arg Ser Cys Gln Asp Val
78      195                      200                      205
80 aac gag tgt gcc acc gag aac ccc tgc gtg caa acc tgc gtc aac acc      672
81 Asn Glu Cys Ala Thr Glu Asn Pro Cys Val Gln Thr Cys Val Asn Thr
82      210                      215                      220
84 tac ggc tct ttc atc tgc cgc tgt gac cca gga tat gaa ctt gag gaa      720
85 Tyr Gly Ser Phe Ile Cys Arg Cys Asp Pro Gly Tyr Gly Leu Glu Glu
86 225                      230                      235                      240
88 gat ggc gtt cat tgc agt gat atg gac gag tgc agc ttc tct gag ttc      768
89 Asp Gly Val His Cys Ser Asp Met Asp Glu Cys Ser Phe Ser Glu Phe
90      245                      250                      255
92 ctc tgc caa cat gag tgt gtg aac cag ccc ggc aca tac ttc tgc tcc      816
93 Leu Cys Gln His Glu Cys Val Asn Gln Pro Gly Thr Tyr Phe Cys Ser
94      260                      265                      270
96 tgc cct cca ggc tac atc ctg ctg gat gac aac cga agc tgc caa gac      864
97 Cys Pro Pro Gly Tyr Ile Leu Leu Asp Asp Asn Arg Ser Cys Gln Asp
98      275                      280                      285
100 atc aac gaa tgt gag cac agg aac cac acg tgc aac ctg cag cag acg      912
101 Ile Asn Glu Cys Glu His Arg Asn His Thr Cys Asn Leu Gln Gln Thr
102      290                      295                      300
104 tgc tac aat tta caa ggg ggc ttc aaa tgc atc gac ccc atc cgc tgt      960
105 Cys Tyr Asn Leu Gln Gly Gly Phe Lys Cys Ile Asp Pro Ile Arg Cys
106 305                      310                      315                      320
108 gag gag cct tat ctg agg atc agt gat aac cgc tgt atg tgt cct gct      1008
109 Glu Glu Pro Tyr Leu Arg Ile Ser Asp Asn Arg Cys Met Cys Pro Ala
110      325                      330                      335
112 gag aac cct ggc tgc aga gac cag ccc ttt acc atc ttg tac cgg gac      1056
113 Glu Asn Pro Gly Cys Arg Asp Gln Pro Phe Thr Ile Leu Tyr Arg Asp
114      340                      345                      350
116 atg gac gtg gtg tca gga cgc tcc gtt ccc gct gac atc ttc caa atg      1104
117 Met Asp Val Val Ser Gly Arg Ser Val Pro Ala Asp Ile Phe Gln Met
118      355                      360                      365
120 caa gcc acg acc cgc tac cct ggg gcc tat tac att ttc cag atc aaa      1152
121 Gln Ala Thr Thr Arg Tyr Pro Gly Ala Tyr Tyr Ile Phe Gln Ile Lys
122      370                      375                      380
124 tct ggg aat gag ggc aga gaa ttt tac atg cgg caa acg ggc ccc atc      1200
125 Ser Gly Asn Glu Gly Arg Glu Phe Tyr Met Arg Gln Thr Gly Pro Ile

```

## RAW SEQUENCE LISTING

DATE: 10/13/2006

PATENT APPLICATION: US/10/594,339

TIME: 15:00:13

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\10132006\J594339.raw

```

126 385          390          395          400
128 agt gcc acc ctg gtg atg aca cgc ccc atc aaa ggg ccc cgg gaa atc      1248
129 Ser Ala Thr Leu Val Met Thr Arg Pro Ile Lys Gly Pro Arg Glu Ile
130          405          410          415
132 cag ctg gac ttg gaa atg atc act gtc aac act gtc atc aac ttc aga      1296
133 Gln Leu Asp Leu Glu Met Ile Thr Val Asn Thr Val Ile Asn Phe Arg
134          420          425          430
136 ggc agc tcc gtg atc cga ctg cgg ata tat gtg tcg cag tac cca ttc      1344
137 Gly Ser Ser Val Ile Arg Leu Arg Ile Tyr Val Ser Gln Tyr Pro Phe
138          435          440          445
140 tga          1347
144 <210> SEQ ID NO: 2
145 <211> LENGTH: 448
146 <212> TYPE: PRT
147 <213> ORGANISM: Homo sapiens
149 <400> SEQUENCE: 2
151 Met Pro Gly Ile Lys Arg Ile Leu Thr Val Thr Ile Leu Ala Leu Cys
152 1          5          10          15
155 Leu Pro Ser Pro Gly Asn Ala Gln Ala Gln Cys Thr Asn Gly Phe Asp
156          20          25          30
159 Leu Asp Arg Gln Ser Gly Gln Cys Leu Asp Ile Asp Glu Cys Arg Thr
160          35          40          45
163 Ile Pro Glu Ala Cys Arg Gly Asp Met Met Cys Val Asn Gln Asn Gly
164          50          55          60
167 Gly Tyr Leu Cys Ile Pro Arg Thr Asn Pro Val Tyr Arg Gly Pro Tyr
168 65          70          75          80
171 Ser Asn Pro Tyr Ser Thr Pro Tyr Ser Gly Pro Tyr Pro Ala Ala Ala
172          85          90          95
175 Pro Pro Leu Ser Ala Pro Asn Tyr Pro Thr Ile Ser Arg Pro Leu Ile
176          100          105          110
179 Cys Arg Phe Gly Tyr Gln Met Asp Glu Ser Asn Gln Cys Val Asp Val
180          115          120          125
183 Asp Glu Cys Ala Thr Asp Ser His Gln Cys Asn Pro Thr Gln Ile Cys
184          130          135          140
187 Ile Asn Thr Glu Gly Gly Tyr Thr Cys Ser Cys Thr Asp Gly Tyr Trp
188 145          150          155          160
191 Leu Leu Glu Gly Gln Cys Leu Asp Ile Asp Glu Cys Arg Tyr Gly Tyr
192          165          170          175
195 Cys Gln Gln Leu Cys Ala Asn Val Pro Gly Ser Tyr Ser Cys Thr Cys
196          180          185          190
199 Asn Pro Gly Phe Thr Leu Asn Glu Asp Gly Arg Ser Cys Gln Asp Val
200          195          200          205
203 Asn Glu Cys Ala Thr Glu Asn Pro Cys Val Gln Thr Cys Val Asn Thr
204          210          215          220
207 Tyr Gly Ser Phe Ile Cys Arg Cys Asp Pro Gly Tyr Glu Leu Glu Glu
208 225          230          235          240
211 Asp Gly Val His Cys Ser Asp Met Asp Glu Cys Ser Phe Ser Glu Phe
212          245          250          255
215 Leu Cys Gln His Glu Cys Val Asn Gln Pro Gly Thr Tyr Phe Cys Ser

```

## RAW SEQUENCE LISTING

DATE: 10/13/2006

PATENT APPLICATION: US/10/594,339

TIME: 15:00:13

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\10132006\J594339.raw

```

216          260          265          270
219 Cys Pro Pro Gly Tyr Ile Leu Leu Asp Asp Asn Arg Ser Cys Gln Asp
220          275          280          285
223 Ile Asn Glu Cys Glu His Arg Asn His Thr Cys Asn Leu Gln Gln Thr
224          290          295          300
227 Cys Tyr Asn Leu Gln Gly Gly Phe Lys Cys Ile Asp Pro Ile Arg Cys
228 305          310          315          320
231 Glu Glu Pro Tyr Leu Arg Ile Ser Asp Asn Arg Cys Met Cys Pro Ala
232          325          330          335
235 Glu Asn Pro Gly Cys Arg Asp Gln Pro Phe Thr Ile Leu Tyr Arg Asp
236          340          345          350
239 Met Asp Val Val Ser Gly Arg Ser Val Pro Ala Asp Ile Phe Gln Met
240          355          360          365
243 Gln Ala Thr Thr Arg Tyr Pro Gly Ala Tyr Tyr Ile Phe Gln Ile Lys
244          370          375          380
247 Ser Gly Asn Glu Gly Arg Glu Phe Tyr Met Arg Gln Thr Gly Pro Ile
248 385          390          395          400
251 Ser Ala Thr Leu Val Met Thr Arg Pro Ile Lys Gly Pro Arg Glu Ile
252          405          410          415
255 Gln Leu Asp Leu Glu Met Ile Thr Val Asn Thr Val Ile Asn Phe Arg
256          420          425          430
259 Gly Ser Ser Val Ile Arg Leu Arg Ile Tyr Val Ser Gln Tyr Pro Phe
260          435          440          445
263 <210> SEQ ID NO: 3
264 <211> LENGTH: 1278
265 <212> TYPE: DNA
266 <213> ORGANISM: Homo sapiens
269 <220> FEATURE:
270 <221> NAME/KEY: CDS
271 <222> LOCATION: (1)..(1278)
273 <400> SEQUENCE: 3
274 cag gca cag tgc acg aat ggc ttt gac ctg gat cgc cag tca gga cag      48
275 Gln Ala Gln Cys Thr Asn Gly Phe Asp Leu Asp Arg Gln Ser Gly Gln
276 1          5          10          15
278 tgt tta gat att gat gaa tgc cga acc atc ccc gag gcc tgc cga gga      96
279 Cys Leu Asp Ile Asp Glu Cys Arg Thr Ile Pro Glu Ala Cys Arg Gly
280          20          25          30
282 gac atg atg tgt gtt aac caa aat ggc ggg tat tta tgc att ccc cgg      144
283 Asp Met Met Cys Val Asn Gln Asn Gly Gly Tyr Leu Cys Ile Pro Arg
284          35          40          45
286 aca aac cct gtg tat cga ggg ccc tac tcg aac ccc tac tcg acc ccc      192
287 Thr Asn Pro Val Tyr Arg Gly Pro Tyr Ser Asn Pro Tyr Ser Thr Pro
288          50          55          60
290 tac tca ggt ccg tac cca gca gct gcc cca cca ctc tca gct cca aac      240
291 Tyr Ser Gly Pro Tyr Pro Ala Ala Ala Pro Pro Leu Ser Ala Pro Asn
292 65          70          75          80
294 tat ccc acg atc tcc agg cct ctt ata tgc cgc ttt gga tac cag atg      288
295 Tyr Pro Thr Ile Ser Arg Pro Leu Ile Cys Arg Phe Gly Tyr Gln Met
296          85          90          95

```

## RAW SEQUENCE LISTING

DATE: 10/13/2006

PATENT APPLICATION: US/10/594,339

TIME: 15:00:13

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\10132006\J594339.raw

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298 gat gaa agc aac caa tgt gtg gat gtg gac gag tgt gca aca gat tcc      336
299 Asp Glu Ser Asn Gln Cys Val Asp Val Asp Glu Cys Ala Thr Asp Ser
300      100      105      110
302 cac cag tgc aac ccc acc cag atc tgc atc aat act gaa ggc ggg tac      384
303 His Gln Cys Asn Pro Thr Gln Ile Cys Ile Asn Thr Glu Gly Gly Tyr
304      115      120      125
306 acc tgc tgc tgc acc gac gga tat tgg ctt ctg gaa ggc cag tgc tta      432
307 Thr Cys Ser Cys Thr Asp Gly Tyr Trp Leu Leu Glu Gly Gln Cys Leu
308      130      135      140
310 gac att gat gaa tgt cgc tat ggt tac tgc cag cag ctc tgt gcg aat      480
311 Asp Ile Asp Glu Cys Arg Tyr Gly Tyr Cys Gln Gln Leu Cys Ala Asn
312 145      150      155      160
314 gtt cct gga tcc tat tct tgt aca tgc aac cct ggt ttt acc ctc aat      528
315 Val Pro Gly Ser Tyr Ser Cys Thr Cys Asn Pro Gly Phe Thr Leu Asn
316      165      170      175
318 gag gat gga agg tct tgc caa gat gtg aac gag tgt gcc acc gag aac      576
319 Glu Asp Gly Arg Ser Cys Gln Asp Val Asn Glu Cys Ala Thr Glu Asn
320      180      185      190
322 ccc tgc gtg cca acc tgc gtc aac acc tac ggc tct ttc atc tgc cgc      624
323 Pro Cys Val Gln Thr Cys Val Asn Thr Tyr Gly Ser Phe Ile Cys Arg
324      195      200      205
326 tgt gac cca gga tat gaa ctt gag gaa gat ggc gtt cat tgc agt gat      672
327 Cys Asp Pro Gly Tyr Glu Leu Glu Glu Asp Gly Val His Cys Ser Asp
328      210      215      220
330 atg gac gag tgc agc ttc tct gag ttc ctc tgc caa cat gag tgt gtg      720
331 Met Asp Glu Cys Ser Phe Ser Glu Phe Leu Cys Gln His Glu Cys Val
332 225      230      235      240
334 aac cag ccc ggc aca tac ttc tgc tcc tgc cct cca ggc tac atc ctg      768
335 Asn Gln Pro Gly Thr Tyr Phe Cys Ser Cys Pro Pro Gly Tyr Ile Leu
336      245      250      255
338 ctg gat gac aac cga agc tgc caa gac atc aac gaa tgt gag cac agg      816
339 Leu Asp Asp Asn Arg Ser Cys Gln Asp Ile Asn Glu Cys Glu His Arg
340      260      265      270
342 aac cac acg tgc aac ctg cag cag acg tgc tac aat tta caa ggg ggc      864
343 Asn His Thr Cys Asn Leu Gln Gln Thr Cys Tyr Asn Leu Gln Gly Gly
344      275      280      285
346 ttc aaa tgc atc gac ccc atc cgc tgt gag gag cct tat ctg agg atc      912
347 Phe Lys Cys Ile Asp Pro Ile Arg Cys Glu Glu Pro Tyr Leu Arg Ile
348      290      295      300
350 agt gat aac cgc tgt atg tgt cct gct gag aac cct ggc tgc aga gac      960
351 Ser Asp Asn Arg Cys Met Cys Pro Ala Glu Asn Pro Gly Cys Arg Asp
352 305      310      315      320
354 cag ccc ttt acc atc ttg tac cgg gac atg gac gtg gtg tca gga cgc      1008
355 Gln Pro Phe Thr Ile Leu Tyr Arg Asp Met Asp Val Val Ser Gly Arg
356      325      330      335
358 tcc gtt ccc gct gac atc ttc caa atg caa gcc acg acc cgc tac cct      1056
359 Ser Val Pro Ala Asp Ile Phe Gln Met Gln Ala Thr Thr Arg Tyr Pro
360      340      345      350
362 ggg gcc tat tac att ttc cag atc aaa tct ggg aat gag ggc aga gaa      1104

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## RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 10/13/2006

PATENT APPLICATION: US/10/594,339

TIME: 15:00:14

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\10132006\J594339.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 140

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:17,18,19,20,21,22,23,24,25,26,27,28,29



VERIFICATION SUMMARY

DATE: 10/13/2006

PATENT APPLICATION: US/10/594,339

TIME: 15:00:14

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\10132006\J594339.raw

L:8 M:201 W: Mandatory field data missing, <130> FILE REFERENCE  
L:10 M:270 C: Current Application Number differs, Replaced Current Application No  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:11 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD

**Raw Sequence Listing before editing,  
for reference only**



IFWP

## RAW SEQUENCE LISTING

DATE: 10/10/2006

PATENT APPLICATION: US/10/594,339

TIME: 14:53:44

Input Set : A:\Sequence Listing 2006-1605A.txt

Output Set: N:\CRF4\10102006\J594339.raw

3 <110> APPLICANT: Kyoto University  
 5 <120> TITLE OF INVENTION: Cleaved forms of DANCE and DANCE complexes, and methods of screening  
 6 an agent for regulating formation of elastic fibre using them  
 W--> 8 <130> FILE REFERENCE:  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/594,339  
 C--> 10 <141> CURRENT FILING DATE: 2006-09-27  
 10 <150> PRIOR APPLICATION NUMBER: JP 2004-096685  
 W--> 11 <151> PRIOR FILING DATE: 2004-3-29  
 13 <160> NUMBER OF SEQ ID NOS: 29  
 15 <170> SOFTWARE: PatentIn version 3.2

Does Not Comply  
 Corrected Diskette Needed

(p8-3)

## ERRORED SEQUENCES

17 <210> SEQ ID NO: 1  
 18 <211> LENGTH: 1347  
 19 <212> TYPE: DNA  
 20 <213> ORGANISM: Homo sapiens  
 23 <220> FEATURE:  
 24 <221> NAME/KEY: CDS  
 25 <222> LOCATION: (1)..(1347)  
 27 <400> SEQUENCE: 1  
 28 atg cca gga ata aaa agg ata ctc act gtt acc att ctg gct ctc tgt 48  
 29 Met Pro Gly Ile Lys Arg Ile Leu Thr Val Thr Ile Leu Ala Leu Cys  
 30 1 5 10 15  
 32 ctt cca agc cct ggg aat gca cag gca cag tgc acg aat ggc ttt gac 96  
 33 Leu Pro Ser Pro Gly Asn Ala Gln Ala Gln Cys Thr Asn Gly Phe Asp  
 34 20 25 30  
 36 ctg gat cgc cag tca gga cag tgt tta gat att gat gaa tgc cga acc 144  
 37 Leu Asp Arg Gln Ser Gly Gln Cys Leu Asp Ile Asp Glu Cys Arg Thr  
 38 35 40 45  
 40 atc ccc gag gcc tgc cga gga gac atg atg tgt gtt aac caa aat ggc 192  
 41 Ile Pro Glu Ala Cys Arg Gly Asp Met Met Cys Val Asn Gln Asn Gly  
 42 50 55 60  
 44 ggg tat tta tgc att ccc cgg aca aac cct gtg tat cga ggg ccc tac 240  
 45 Gly Tyr Leu Cys Ile Pro Arg Thr Asn Pro Val Tyr Arg Gly Pro Tyr  
 46 65 70 75 80  
 48 tcg aac ccc tac tcg acc ccc tac tca ggt ccg tac cca gca gct gcc 288  
 49 Ser Asn Pro Tyr Ser Thr Pro Tyr Ser Gly Pro Tyr Pro Ala Ala Ala  
 50 85 90 95  
 52 cca cca ctc tca gct cca aac tat ccc acg atc tcc agg cct ctt ata 336  
 53 Pro Pro Leu Ser Ala Pro Asn Tyr Pro Thr Ile Ser Arg Pro Leu Ile  
 54 100 105 110

## RAW SEQUENCE LISTING

DATE: 10/10/2006

PATENT APPLICATION: US/10/594,339

TIME: 14:53:44

Input Set : A:\Sequence Listing 2006-1605A.txt

Output Set: N:\CRF4\10102006\J594339.raw

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56 tgc cgc ttt gga tac cag atg gat gaa agc aac caa tgt gtg gat gtg      384
57 Cys Arg Phe Gly Tyr Gln Met Asp Glu Ser Asn Gln Cys Val Asp Val
58      115      120      125
60 gac gag tgt gca aca gat tcc cac cag tgc aac ccc acc cag atc tgc      432
61 Asp Glu Cys Ala Thr Asp Ser His Gln Cys Asn Pro Thr Gln Ile Cys
62      130      135      140
64 atc aat act gaa ggc ggg tac acc tgc tcc tgc acc gac gga tat tgg      480
65 Ile Asn Thr Glu Gly Gly Tyr Thr Cys Ser Cys Thr Asp Gly Tyr Trp
66 145      150      155      160
68 ctt ctg gaa ggc cag tgc tta gac att gat gaa tgt cgc tat ggt tac      528
69 Leu Leu Glu Gly Gln Cys Leu Asp Ile Asp Glu Cys Arg Tyr Gly Tyr
70      165      170      175
72 tgc cag cag ctc tgt gcg aat gtt cct gga tcc tat tct tgt aca tgc      576
73 Cys Gln Gln Leu Cys Ala Asn Val Pro Gly Ser Tyr Ser Cys Thr Cys
74      180      185      190
76 aac cct ggt ttt acc ctc aat gag gat gga agg tct tgc caa gat gtg      624
77 Asn Pro Gly Phe Thr Leu Asn Glu Asp Gly Arg Ser Cys Gln Asp Val
78      195      200      205
80 aac gag tgt gcc acc gag aac ccc tgc gtg caa acc tgc gtc aac acc      672
81 Asn Glu Cys Ala Thr Glu Asn Pro Cys Val Gln Thr Cys Val Asn Thr
82      210      215      220
84 tac ggc tct ttc atc tgc cgc tgt gac cca gga tat gaa ctt gag gaa      720
85 Tyr Gly Ser Phe Ile Cys Arg Cys Asp Pro Gly Tyr Glu Leu Glu Glu
86 225      230      235      240
88 gat ggc gtt cat tgc agt gat atg gac gag tgc agc ttc tct gag ttc      768
89 Asp Gly Val His Cys Ser Asp Met Asp Glu Cys Ser Phe Ser Glu Phe
90      245      250      255
92 ctc tgc caa cat gag tgt gtg aac cag ccc ggc aca tac ttc tgc tcc      816
93 Leu Cys Gln His Glu Cys Val Asn Gln Pro Gly Thr Tyr Phe Cys Ser
94      260      265      270
96 tgc cct cca ggc tac atc ctg ctg gat gac aac cga agc tgc caa gac      864
97 Cys Pro Pro Gly Tyr Ile Leu Leu Asp Asp Asn Arg Ser Cys Gln Asp
98      275      280      285
100 atc aac gaa tgt gag cac agg aac cac acg tgc aac ctg cag cag acg      912
101 Ile Asn Glu Cys Glu His Arg Asn His Thr Cys Asn Leu Gln Gln Thr
102      290      295      300
104 tgc tac aat tta caa ggg ggc ttc aaa tgc atc gac ccc atc cgc tgt      960
105 Cys Tyr Asn Leu Gln Gly Gly Phe Lys Cys Ile Asp Pro Ile Arg Cys
106 305      310      315      320
108 gag gag cct tat ctg agg atc agt gat aac cgc tgt atg tgt cct gct      1008
109 Glu Glu Pro Tyr Leu Arg Ile Ser Asp Asn Arg Cys Met Cys Pro Ala
110      325      330      335
112 gag aac cct ggc tgc aga gac cag ccc ttt acc atc ttg tac cgg gac      1056
113 Glu Asn Pro Gly Cys Arg Asp Gln Pro Phe Thr Ile Leu Tyr Arg Asp
114      340      345      350
116 atg gac gtg gtg tca gga cgc tcc gtt ccc gct gac atc ttc caa atg      1104
117 Met Asp Val Val Ser Gly Arg Ser Val Pro Ala Asp Ile Phe Gln Met
118      355      360      365
120 caa gcc acg acc cgc tac cct ggg gcc tat tac att ttc cag atc aaa      1152

```

## RAW SEQUENCE LISTING

DATE: 10/10/2006

PATENT APPLICATION: US/10/594,339

TIME: 14:53:44

Input Set : A:\Sequence Listing 2006-1605A.txt

Output Set: N:\CRF4\10102006\J594339.raw

```

121 Gln Ala Thr Thr Arg Tyr Pro Gly Ala Tyr Tyr Ile Phe Gln Ile Lys
122      370      375      380
124 tct ggg aat gag ggc aga gaa ttt tac atg cgg caa acg ggc ccc atc      1200
125 Ser Gly Asn Glu Gly Arg Glu Phe Tyr Met Arg Gln Thr Gly Pro Ile
126 385      390      395      400
128 agt gcc acc ctg gtg atg aca cgc ccc atc aaa ggg ccc cgg gaa atc      1248
129 Ser Ala Thr Leu Val Met Thr Arg Pro Ile Lys Gly Pro Arg Glu Ile
130      405      410      415
132 cag ctg gac ttg gaa atg atc act gtc aac act gtc atc aac ttc aga      1296
133 Gln Leu Asp Leu Glu Met Ile Thr Val Asn Thr Val Ile Asn Phe Arg
134      420      425      430
136 ggc agc tcc gtg atc cga ctg cgg ata tat gtg tcg cag tac cca ttc      1344
137 Gly Ser Ser Val Ile Arg Leu Arg Ile Tyr Val Ser Gln Tyr Pro Phe
138      435      440      445
E--> 140 tga
141 1347

```

1347

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 10/10/2006  
PATENT APPLICATION:    US/10/594,339      TIME: 14:53:46

Input Set : A:\Sequence Listing 2006-1605A.txt  
Output Set: N:\CRF4\10102006\J594339.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:17,18,19,20,21,22,23,24,25,26,27,28,29

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/594,339

DATE: 10/10/2006

TIME: 14:53:46

Input Set : A:\Sequence Listing 2006-1605A.txt

Output Set: N:\CRF4\10102006\J594339.raw

L:8 M:201 W: Mandatory field data missing, <130> FILE REFERENCE  
L:10 M:270 C: Current Application Number differs, Replaced Current Application No  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:11 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD  
L:140 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1347 SEQ:1